

Title: **Partial Harvesting in Intensive Shrim Culture: A Network-Flow Model**

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Abstract: Theoretically, partially harvesting the standing stock of cultured species over the growout cycle to reduce competitive pressure due to increased biomass could enhance growth and total yield. There are several promising laboratory results and theoretical arguments on the potential of partial harvesting in enhancing the productivity and profitability of intensive shrimp growout facilities. However, the implementation of partial harvesting in practical operation is rather difficult due to its complex nature. In this paper, we developed a practical model of partial harvesting using the network-flow approach so that it can be readily implemented and solved in MS EXCEL. We demonstrated the use of this spreadsheet model with data from a commercial shrimp farm in Hawaii. The results indicate that the model is capable of identifying the efficient harvest policy as well as assessing the viability of partial harvesting under a variety of managerial conditions and objectives.